

and bowl provided by a recessed thread form that is spaced from and
in non-engaging relation with the screw threads on the other of the
support and bowl, and a thread producing insert seated in said
thread form, said insert projecting from the thread form and into
5 engagement with [providing] the screw threads [surface in mated
engagement with the thread] of the other of said support and said
bowl.

(Amended) A rock crusher [including an] comprising:

10 a conical shaped bowl, a cone mounted for oscillating [cone]
movement within [a] the conical shaped bowl, said [wherein the]
bowl [is] being vertically adjustable relative to the cone for
crushing rock to specific sizes; [, said rock crusher comprising:]

a frame including an annular bowl support, [a] said bowl
15 adjustably supported within said annular bowl support for vertical
adjustment of the bowl relative to the cone;

said vertical adjustment provided by mated screw threads on
said support and said bowl whereby the bowl is screwed up or down
on the support and thereby closer or farther away from said bowl;

20 an annular lock ring having a screw thread mated to the bowl
and screwed onto the bowl and defining [a] an annular surface in
abutment with [a] an annular surface of the support;

an annular chamber provided in one of the lock ring and bowl
support and an annular piston fitted to the chamber, said piston

providing the abutment surface for one of said lock ring [or] and
bowl support; and

92 a hydraulic fluid source providing hydraulic fluid to the
chamber, and a control for controlling the hydraulic fluid flow to
5 the chamber for urging movement of the annular piston toward the
[support] surface of the other of the lock ring and support and
thereby producing a binding-type lock that inhibits screw movement
of the bowl.

10

REMARKS

The claims have been amended to hopefully overcome the \$112
rejections. The claims have been further amended to emphasize the
differences over the cited references. To the extent that there
are issues remaining to be resolved, the undersigned here requests
15 a telephone interview for resolution.

15

The invention of Claim 1 is directed to the provision of mated
screw threads provided on a bowl support and bowl of a rock crusher
whereby one of the screw threads is an insert. The weight applied
20 to the screw threads is measured in the thousands of pounds and
galling and heat induced welding is a problem.

20

It is known that the problem can be largely alleviated if one
or the other of the thread surfaces is provided with a dissimilar
25 material. U.S. Patent No. 4,571,112 (cited at page 4 of the

25